भारतीय मानक Indian Standard

कोणीय ऑथोंपेडिक गॉज चिमटी — विशिष्टि

IS 6485: 2023

(पहला पुनरीक्षण)

Angular Orthopaedic Gouge Forceps — Specification

(First Revision)

ICS 11.040.40

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Orthopaedic Instruments, Implants and Accessories Sectional Committee, MHD 02

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Orthopaedic Instruments, Implants and Accessories Sectional Committee had been approved by the Medical Equipment and Hospital Planning Division Council.

This standard was originally published in 1972. The first revision of this standard has been brought out to align it with the recent developments and to bring the standard in line with the latest style and format of Indian Standards.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2:2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be same as that of the specified value in this standard.

Indian Standard

ANGULAR ORTHOPAEDIC GOUGE FORCEPS — SPECIFICATION

(First Revision)

1 SCOPE

This standard specifies the requirements for angular type gouge forceps used in orthopaedic surgery.

2 REFERENCES

The standards given below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of these standards.

IS No. Title IS 1570 (Part 5): Schedules for wrought 1985 steels: Part 5 Stainless and heat-resisting steels (second revision) IS 7531: 1990 Surgical Instruments Corrosion resistance of stainless steel surgical instruments - Methods of tests (first revision)

3 MATERIAL

3.1 Arms

The arms shall be of stainless steel having the following composition:

Sl No.	Constituent	Percent
(1)	(2)	(3)
i)	Carbon	0.35 to 0.45
ii)	Silicon	1.0 <i>Max</i>
iii)	Manganese	1.0 <i>Max</i>
iv)	Chromium	12.5 to 14.5
v)	Nickel	1.0 <i>Max</i>
vi)	Sulphur	0.03 <i>Max</i>
vii)	Phosphorus	0.03 <i>Max</i>

3.2 Springs

The springs shall be made of stainless-steel conforming to designation X30Cr13 of IS 1570 (Part 5).

3.3 Screws

The screws shall be made of stainless-steel conforming to designation X22Cr13 of IS 1570 (Part 5).

4 SHAPE AND DIMENSIONS

The shape and dimensions shall be as shown in Fig. 1.

5 WORKMANSHIP

- **5.1** The forceps shall be free from rough edges, pits, burrs, cracks and blemishes of any kind.
- **5.2** The cutting edges shall be sharp and uniform.
- **5.3** When the jaws are closed, the cutting edges shall meet evenly.
- **5.4** The joints shall have no undue play.
- **5.5** The spring action shall be smooth. It shall be neither too hard nor too slack.
- **5.6** The compound action shall be smooth and free from jerks.

6 HEAT TREATMENT

The arms shall be hardened and tempered to $520\,\mathrm{HV}$ to $600\,\mathrm{HV}$, the springs to $380\,\mathrm{HV}$ to $420\,\mathrm{HV}$ and the screws to $290\,\mathrm{HV}$ to $320\,\mathrm{HV}$.

7 FINISH

The forceps shall be finished smooth, passivated and polished bright.

8 TESTS

8.1 Performance Test

Cut a piece of rib of a fully grown goat or sheep fivetimes with the instrument. Each time the instrument shall cut the rib neatly and evenly in one bite without any undue resistance, and cutting edges shall not show any sign of damage.

8.2 Load Closure Test

Apply a compressive force of 15 N \pm 2 N at the ends of the handles. The cutting edges shall meet evenly after the test.

8.3 Corrosion Resistance Test

The forceps shall satisfy the requirements when tested in accordance with IS 7531.

9 MARKING

- **9.1** The forceps shall be marked with the following:
 - a) Manufacturer's name, initials or registered trade-mark; and

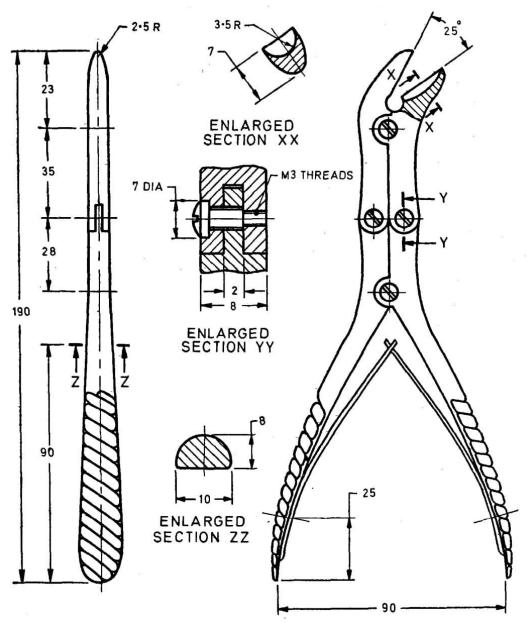
b) Country of origin.

9.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed there under, and the product(s) may be marked with the Standard Mark.

10 PACKING

The packing shall be as agreed to between the purchaser and the supplier.



All dimensions in millimeters.

Fig. 1 Angular Gouge Forceps

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected	

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